Site: [illegible]
ID# [illegible]
Break:
Other:
6-22-2000

ENVIRONMENTAL PROTECTION AGENCY
901 N. 5th St.
KANSAS CITY, KS 66101

TO: Pat Cossins	**FROM:** Don Hamerlinck
COMPANY: Tetra Tech	**Superfund Division**
DEPT.	**PHONE #** 551-7818
FAX # 913 894-6295	**FAX #** (913) 551-7948

COMMENTS:

Pat FYI

# of pages Cover + 16

#: 13193

S00129994
SUPERFUND RECORDS

TO: DON HAMERA 913-551-7948

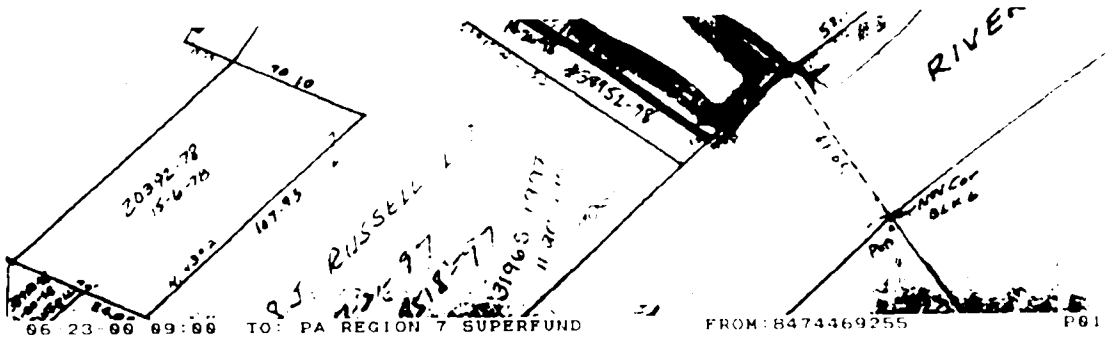
FROM: NICK PAPPAS

RE: OLD DS FRANCAR PROPERTY
725 Federal St, DAVENPORT IA

I was able to get the enclosed report had some issues over payment for it.

It appears from the plat that the parking lot to the north is not part of the property.

Please call with any questions.
(319) 285-6536
or (847) 452-6372



Blackhawk

CONSULTING SERVICES

April 24, 2000

Mr. Ron Schiltz
Schiltz Properties, Inc.
736 Federal Street
Davenport, Iowa 52803

RE: Limited Phase II Environmental Assessment
Former Franche Paint Company Property
735 Federal Street
Davenport, Iowa

Blackhawk Consulting Services, Inc. is pleased to present this report for environmental/geological work. Services included drilling, installation of temporary monitoring wells with locking caps, well development, groundwater elevation measurements, soil sampling and groundwater sampling.

The rationale used for boring placement was dependent primarily on review of historical aerial photographs and an exploratory tour of the property. The target assessment areas were:

1. The above ground tank impoundment;
2. Heating oil boiler and possible underground tank area;
3. Area assumed to be downgradient in regards to groundwater flow from the building (paint mixing areas);
4. Downgradient property periphery.

Reference the attached Site Map.

A total of 7 borings were performed. Some borings were outfitted as temporary monitoring wells. Soil boring observations indicated that contaminants in the subsurface originated on-site. Strong petrochemical odors and staining were observed in 6 borings. Strong petrochemical odors and discolorations were also observed in groundwater which was encountered in 5 borings. Bedrock consisting of fractured limestone was encountered in 5 of the borings. Reference the attached Assessment Methods for procedures used.

ANALYTICAL TESTING

A soil sample from below a former above ground tank was laboratory tested using EPA Method 8260 for volatile hydrocarbon compounds and EPA Method 6010 for total lead. This sample was selected due to the presence of obvious hydrocarbon odors.

Selected groundwater samples were laboratory tested using EPA Method 8270 for acid extractable and base neutral compounds, EPA Method 8260 for volatile hydrocarbon compounds and EPA Method 8310 for polynuclear aromatic hydrocarbons. Analytical testing was not comprehensive, but selective based on chemicals typically associated with target area processes and soil observations during drilling.

SOIL SAMPLE RESULTS

The following table presents a comparison of compounds in a soil sample obtained on March 20, 2000 to Iowa Underground Tank regulations. The values are presented in micrograms-per-liter (µg/L), or parts-per-billion (ppb):

PETROLEUM IN SOIL

Petroleum Compound	Franche Sample B-4	Iowa Tier 1 Default Values
Toluene	**588,000**	42,000
Xylenes	**56,500**	Not listed

GROUNDWATER SAMPLE RESULTS

The following table presents a comparison of compounds in a groundwater sample obtained on March 21, 2000 to USEPA Drinking Water "Maximum Contaminant Levels" and Iowa Underground Tank regulations. The values are presented in micrograms-per-liter (µg/L), or parts-per-billion (ppb):

PETROLEUM IN GROUNDWATER

Petroleum Compound	Franche Sample B-4	Franche Sample MW-2	Groundwater MCL
Benz (a) anthracene	**1.81**	**0.753**	0.13
Benzo (a) pyrene	**0.886**	0.137	0.2
Benzo (b) fluoranthene	**2.82**	**0.682**	0.18
Chrysene	**5.20**	1.21	1.5
Dibenz(a,h) anthracene	**0.392**	< 0.02	0.3

Reference the attached laboratory reports and sampling documentation.

GROUNDWATER FLOW

Based on Blackhawk Consulting Services' experience in the area and on groundwater depths, general shallow groundwater flow was to the south and southwest. Seasonal changes in the Mississippi River level affect the area and groundwater flow directions may fluctuate.

CONCLUSION

Multiple petrochemical compounds were detected in shallow groundwater at the site. Several compound were above Federal or Iowa standards. Based on the risk of human exposure to the chemicals during site renovation or utility work in the area, the property should be remediated. A recommended remedial alternative is presented in the next section.

SITE RESTORATION AND EXPENSE ESTIMATES

The contaminants present in soil and shallow groundwater have specific gravities less than water, or are typically "lighter than water". Denser aqueous or non-aqueous compounds such as chlorinated hydrocarbons (cleaners, degreasers...) were not present in soil or groundwater samples. Therefore, petrochemicals in the subsurface likely did not migrate deep into the bedrock unit below. This makes the site a good candidate for a cleanup method Blackhawk Consulting Services has termed Bio-injection, in-which contaminants are treated in place. Reference Attachment 1 for an explanation of the cleanup method.

Bio-injection applications over a period of 2 years are estimated at $85,000. Reporting the site status to regulatory agencies would add an estimated $25,000. Periodic groundwater monitoring (sampling) would total approximately $20,000.

Other issues which were not investigated but which may incur additional cleanup expenses are as follows. The costs presented are generalized estimates:

1. Removal and reporting associated with a heating oil tank, if present:	$15,000
2. Asbestos tile removal and disposal:	$10,000
3. Lead Paint removal and disposal:	$20,000
4. Basement vat cleaning and sludge disposal:	$12,000

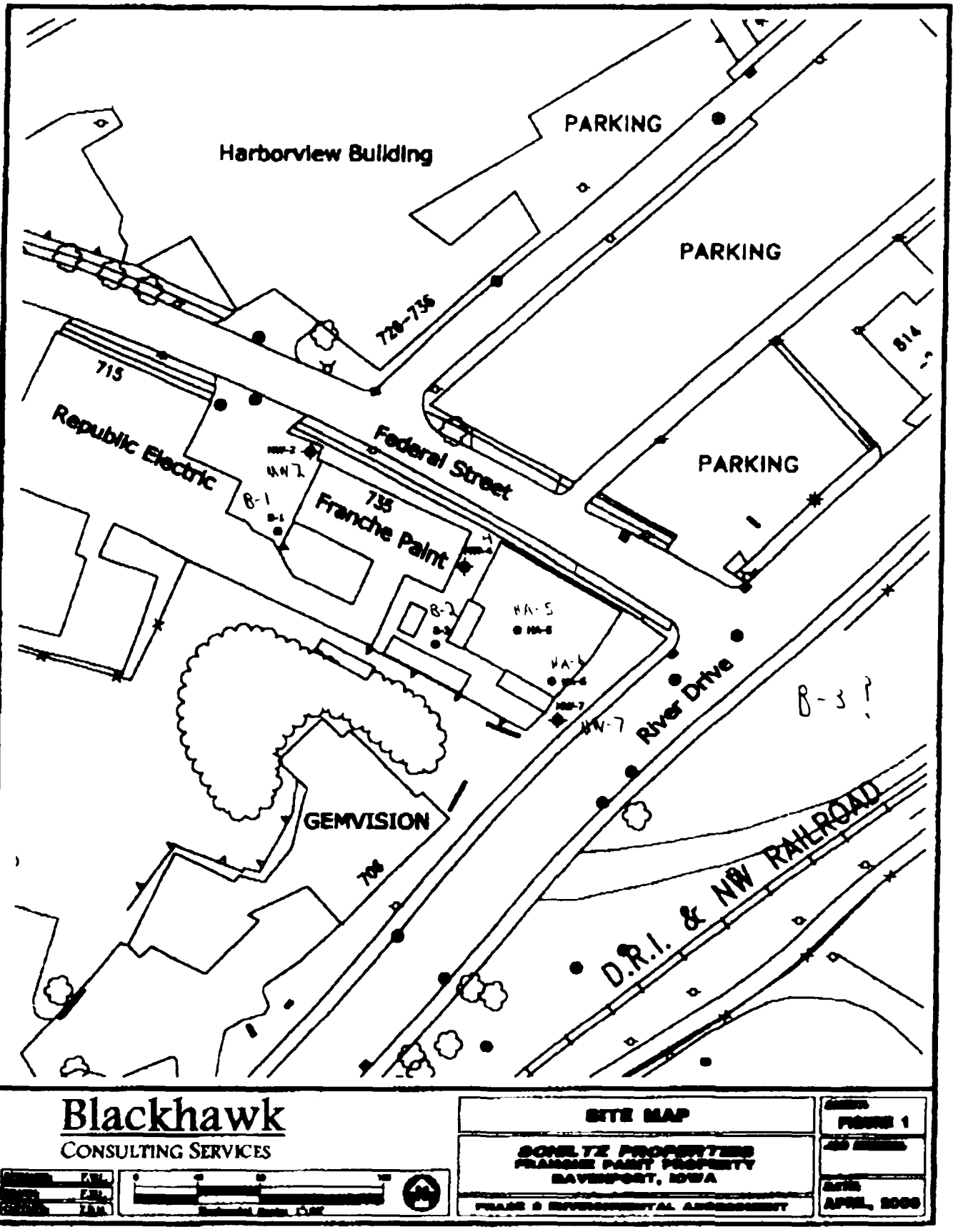
Upon notification from Schiltz Properties, Inc., borings will be back-filled with an expanding clay (bentonite) and drill cuttings.

Blackhawk Consulting Services does not recommend acquisition of the property without full indemnification from regulatory agencies such as the USEPA. If you have questions or require further assistance, please contact us.

Blackhawk Consulting Services, Inc.

Zachary D. Miller
Consulting Geologist

ATTACHMENTS: SITE MAP
ASSESSMENT METHODS
ANALYTICAL LABORATORY REPORTS
BIO-INJECTION EXPLANATION


Harborview Building
PARKING
PARKING
PARKING
728-736
715
Republic Electric
Federal Street
735
Franche Paint
B-1
B-2
MW-2
MW-3
MW-4
MW-5
MW-6
MW-7
River Drive
GEMVISION
705
D.R.I. & NW RAILROAD
B-3 ?
814
Blackhawk
CONSULTING SERVICES
SITE MAP
SONETTE PROPERTIES
FRANCHE PAINT PROPERTY
DAVENPORT, IOWA
PHASE II ENVIRONMENTAL ASSESSMENT
FIGURE 1
APRIL, 2000
FWL, Blackhawk Consulting Services, Inc.
04/24/2000 3:22 PM
Franche_base1.dwg

GREAT LAKES ANALYTICAL

1380 Busch Parkway
Buffalo Grove, Illinois 60089

Email: info@glalabs.com
(847) 808-7766 FAX (847) 808-7772

Blackhawk Consulting Services	Project: Franche Paint	Sampled: 3/20/00 to 3/21/00
3700 Blackhawk Rd. #10	Project Number: N/A	Received: 3/22/00
Rock Island, IL 61201	Project Manager: Fred Lawrence	Reported: 4/7/00 14:56

Total Metals by EPA 6000/7000 Series Methods
Great Lakes Analytical

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method	Reporting Limit	Result	Units	Notes*
HA-6			B003469-01				**Soil**	
Lead	0030818	3/30/00	3/31/00	EPA 6010B	1.00	ND	mg/kg	G2

Great Lakes Analytical

Refer to end of report for text of notes and definitions

Satal Patel, Project Manager

Accreditations/Certifications: Illinois EPA 100261 New Jersey DEP 54001
USACE, Wisconsin DNR 9999 ...

GREAT LAKES ANALYTICAL

1380 Busch Parkway
Buffalo Grove, Illinois 60089

Email info@glalabs.com
(847) 808-7766 FAX (847) 808-7772

Blackhawk Consulting Services	Project:	Franche Paint	Sampled: 3/20/00 to 3/21/00
3700 Blackhawk Rd. #10	Project Number:	N/A	Received: 3/22/00
Rock Island, IL 61201	Project Manager:	Fred Lawrence	Reported: 4/7/00 14:56

Volatile Organic Compounds by EPA Method 8260B
Great Lakes Analytical

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
MW-7			B003469-04				Water	
Acetone	0030725	4/27/00	3/27/00		10.0	14.8	ug/l	A
Benzene	"	"	"		2.00	ND	"	
Bromodichloromethane	"	"	"		2.00	ND	"	
Bromoform	"	"	"		2.00	ND	"	
Bromomethane	"	"	"		2.00	ND	"	
2-Butanone	"	"	"		10.0	ND	"	
Carbon disulfide	"	"	"		2.00	ND	"	
Carbon tetrachloride	"	"	"		2.00	ND	"	
Chlorobenzene	"	"	"		2.00	ND	"	
Chlorodibromomethane	"	"	"		2.00	ND	"	
Chloroethane	"	"	"		2.00	ND	"	
Chloroform	"	"	"		2.00	ND	"	
Chloromethane	"	"	"		2.00	ND	"	
1,1-Dichloroethane	"	"	"		2.00	ND	"	
1,2-Dichloroethane	"	"	"		2.00	ND	"	
1,1-Dichloroethene	"	"	"		2.00	ND	"	
cis-1,2-Dichloroethene	"	"	"		2.00	ND	"	
trans-1,2-Dichloroethene	"	"	"		2.00	ND	"	
1,2-Dichloropropane	"	"	"		2.00	ND	"	
cis-1,3-Dichloropropene	"	"	"		2.00	ND	"	
trans-1,3-Dichloropropene	"	"	"		2.00	ND	"	
Ethylbenzene	"	"	"		2.00	ND	"	
2-Hexanone	"	"	"		10.0	ND	"	
Methylene chloride	"	"	"		2.00	ND	"	
4-Methyl-2-pentanone	"	"	"		10.0	ND	"	
Styrene	"	"	"		2.00	ND	"	
1,1,2,2-Tetrachloroethane	"	"	"		2.00	ND	"	
Tetrachloroethene	"	"	"		2.00	ND	"	
Toluene	"	"	"		2.00	ND	"	
1,1,1-Trichloroethane	"	"	"		2.00	ND	"	
1,1,2-Trichloroethane	"	"	"		2.00	ND	"	
Trichloroethene	"	"	"		2.00	ND	"	
Vinyl chloride	"	"	"		2.00	ND	"	
Total Xylenes	"	"	"		2.00	ND	"	
Surrogate: Dibromofluoromethane	"	"	"	*86.0-118*		*105*	%	
Surrogate: 1,2-Dichloroethane-d4	"	"	"	*80.0-120*		*103*	"	
Surrogate: Toluene-d8	"	"	"	*88.0-110*		*100*	"	
Surrogate: 4-Bromofluorobenzene	"	"	"	*86.0-115*		*96.8*	"	

Great Lakes Analytical

**Refer to end of report for text of notes and definitions.*

Sunil Patel, Project Manager

GREAT LAKES ANALYTICAL

1380 Busch Parkway
Buffalo Grove, Illinois 60089

Email: info@glalabs.com
(847) 808-7766 FAX (847) 808-7772

Blackhawk Consulting Services	Project:	Pranche Paint	Sampled: 3/20/00 to 3/21/00
3700 Blackhawk Rd. #10	Project Number:	N/A	Received: 3/22/00
Rock Island, IL 61201	Project Manager:	Fred Lawrence	Reported: 4/7/00 14:56

Semivolatile Organic Compounds by EPA Method 8270C
Great Lakes Analytical

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
MW-7			B003469-04				Water	
Acenaphthene	0030577	3/23/00	3/28/00		2.00	ND	ug/l	
Acenaphthylene	"	"	"		2.00	ND	"	
Aniline	"	"	"		2.00	ND	"	
Anthracene	"	"	"		2.00	ND	"	
Benzoic acid	"	"	"		10.0	ND	"	
Benz (a) anthracene	"	"	"		2.00	ND	"	
Benzo (a) pyrene	"	"	"		2.00	ND	"	
Benzo (b) fluoranthene	"	"	"		2.00	ND	"	
Benzo (ghi) perylene	"	"	"		2.00	ND	"	
Benzo (k) fluoranthene	"	"	"		2.00	ND	"	
Benzyl alcohol	"	"	"		2.00	ND	"	
Bis(2-chloroethoxy)methane	"	"	"		2.00	ND	"	
Bis(2-chloroethyl)ether	"	"	"		2.00	ND	"	
Bis(2-chloroisopropyl)ether	"	"	"		2.00	ND	"	
Bis(2-ethylhexyl)phthalate	"	"	"		10.0	ND	"	
4-Bromophenyl phenyl ether	"	"	"		2.00	ND	"	
Butyl benzyl phthalate	"	"	"		2.00	ND	"	
4-Chloroaniline	"	"	"		2.00	ND	"	
4-Chloro-3-methylphenol	"	"	"		2.00	ND	"	
2-Chloronaphthalene	"	"	"		2.00	ND	"	
2-Chlorophenol	"	"	"		2.00	ND	"	
4-Chlorophenyl phenyl ether	"	"	"		2.00	ND	"	
Chrysene	"	"	"		2.00	ND	"	
Dibenz (a,h) anthracene	"	"	"		2.00	ND	"	
Dibenzofuran	"	"	"		2.00	ND	"	
1,2-Dichlorobenzene	"	"	"		2.00	ND	"	
1,3-Dichlorobenzene	"	"	"		2.00	ND	"	
1,4-Dichlorobenzene	"	"	"		2.00	ND	"	
3,3'-Dichlorobenzidine	"	"	"		10.0	ND	"	
2,4-Dichlorophenol	"	"	"		2.00	ND	"	
Diethyl phthalate	"	"	"		2.00	ND	"	
2,4-Dimethylphenol	"	"	"		2.00	ND	"	
Dimethyl phthalate	"	"	"		2.00	ND	"	
Di-n-butyl phthalate	"	"	"		10.0	ND	"	
4,6-Dinitro-2-methylphenol	"	"	"		10.0	ND	"	
2,4-Dinitrophenol	"	"	"		10.0	ND	"	
2,4-Dinitrotoluene	"	"	"		2.00	ND	"	
2,6-Dinitrotoluene	"	"	"		2.00	ND	"	

Great Lakes Analytical

Refer to end of report for text of notes and definitions

Sunil Patel, Project Manager

GREAT LAKES ANALYTICAL
1380 Busch Parkway
Buffalo Grove, Illinois 60089
Email: info@glalabs.com
(847) 808-7766 FAX (847) 808 7772

Blackhawk Consulting Services	Project: Franche Paint	Sampled:	3/20/00 to 3/21/00
3700 Blackhawk Rd. #10	Project Number: N/A	Received:	3/22/00
Rock Island, IL 61201	Project Manager: Fred Lawrence	Reported:	4/7/00 14:56

Semivolatile Organic Compounds by EPA Method 8270C
Great Lakes Analytical

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
MW-7 (continued)			**B003469-04**				**Water**	
Di-n-octyl phthalate	0030577	3/23/00	3/28/00		2.00	ND	ug/l	
Fluoranthene	"	"	"		2.00	ND	"	
Fluorene	"	"	"		2.00	ND	"	
Hexachlorobenzene	"	"	"		2.00	ND	"	
Hexachlorobutadiene	"	"	"		2.00	ND	"	
Hexachlorocyclopentadiene	"	"	"		2.00	ND	"	
Hexachloroethane	"	"	"		2.00	ND	"	
Indeno (1,2,3-cd) pyrene	"	"	"		2.00	ND	"	
Isophorone	"	"	"		2.00	ND	"	
2-Methylnaphthalene	"	"	"		2.00	**22.6**	"	
o-Cresol	"	"	"		2.00	ND	"	
m,p-Cresols	"	"	"		2.00	ND	"	
Naphthalene	"	"	"		2.00	ND	"	
2-Nitroaniline	"	"	"		10.0	ND	"	
3-Nitroaniline	"	"	"		10.0	ND	"	
4-Nitroaniline	"	"	"		10.0	ND	"	
Nitrobenzene	"	"	"		2.00	ND	"	
2-Nitrophenol	"	"	"		2.00	ND	"	
4-Nitrophenol	"	"	"		10.0	ND	"	
N-Nitrosodi-n-propylamine	"	"	"		2.00	ND	"	
N-Nitrosodiphenylamine	"	"	"		2.00	ND	"	
Pentachlorophenol	"	"	"		10.0	ND	"	
Phenanthrene	"	"	"		2.00	**3.67**	"	
Phenol	"	"	"		2.00	ND	"	
Pyrene	"	"	"		2.00	ND	"	
1,2,4-Trichlorobenzene	"	"	"		2.00	ND	"	
2,4,5-Trichlorophenol	"	"	"		10.0	ND	"	
2,4,6-Trichlorophenol	"	"	"		2.00	ND	"	
Surrogate: 2-Fluorophenol	"	"	"	*10.0-124*		*24.9*	%	
Surrogate: Phenol-d6	"	"	"	*10.0-83.0*		*15.5*	"	
Surrogate: Nitrobenzene-d5	"	"	"	*29.0-89.0*		*55.5*	"	
Surrogate: 2-Fluorobiphenyl	"	"	"	*31.0-86.0*		*36.1*	"	
Surrogate: 2,4,6-Tribromophenol	"	"	"	*10.0-159*		*35.8*	"	
Surrogate: p-Terphenyl-d14	"	"	"	*23.0-98.0*		*50.1*	"	

Great Lakes Analytical

*Refer to end of report for text of notes and definitions

Satal Patel, Project Manager

Accreditations/Certifications: Illinois EPA 100261 New Jersey DEP 54001, USACE, Wisconsin DNR 999917760

GREAT LAKES ANALYTICAL

1380 Busch Parkway
Buffalo Grove, Illinois 60089

Email: info@glalabs.com
(847) 808-7766 FAX (847) 808-7772

Blackhawk Consulting Services	Project:	Tranche Paint	Sampled: 3/20/00 to 3/21/00
3700 Blackhawk Rd. #10	Project Number:	N/A	Received: 3/22/00
Rock Island, IL 61201	Project Manager:	Fred Lawrence	Reported: 4/7/00 14:56

Polynuclear Aromatic Compounds by EPA Method 8310
Great Lakes Analytical

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
MW-2			**B003469-02**				**Water**	
Acenaphthene	0030562	3/23/00	3/27/00		5.00	ND	ug/l	
Acenaphthylene	"	"	"		4.00	**7.28**	"	
Anthracene	"	"	"		0.200	**2.44**	"	
Benz (a) anthracene	"	"	"		0.0100	**0.753**	"	
Benzo (a) pyrene	"	"	"		0.0500	**0.137**	"	
Benzo (b) fluoranthene	"	"	"		0.0200	**0.682**	"	
Benzo (ghi) perylene	"	"	"		0.0600	ND	"	
Benzo (k) fluoranthene	"	"	"		0.0500	ND	"	
Chrysene	"	"	"		0.0500	**1.21**	"	
Dibenz (a,h) anthracene	"	"	"		0.0200	ND	"	
Fluoranthene	"	"	"		1.00	**14.8**	"	
Fluorene	"	"	"		1.00	**2.77**	"	
Indeno (1,2,3-cd) pyrene	"	"	"		0.200	**0.697**	"	
Naphthalene	"	"	"		3.00	ND	"	
Phenanthrene	"	"	"		0.300	**4.05**	"	
Pyrene	"	"	"		1.00	ND	"	
Surrogate: Carbazole	"	"	"	*70-0-130*		*101*	%	
MW-4			**B003469-03**				**Water**	
Acenaphthene	0030562	3/23/00	3/27/00		5.00	ND	ug/l	
Acenaphthylene	"	"	"		4.00	ND	"	
Anthracene	"	"	"		0.200	ND	"	
Benz (a) anthracene	"	"	"		0.0100	**0.0362**	"	
Benzo (a) pyrene	"	"	"		0.0500	ND	"	
Benzo (b) fluoranthene	"	"	"		0.0200	**0.0471**	"	
Benzo (ghi) perylene	"	"	"		0.0600	ND	"	
Benzo (k) fluoranthene	"	"	"		0.0500	ND	"	
Chrysene	"	"	"		0.0500	**0.0621**	"	
Dibenz (a,h) anthracene	"	"	"		0.0200	ND	"	
Fluoranthene	"	"	"		1.00	ND	"	
Fluorene	"	"	"		1.00	ND	"	
Indeno (1,2,3-cd) pyrene	"	"	"		0.200	**0.492**	"	
Naphthalene	"	"	"		3.00	ND	"	
Phenanthrene	"	"	"		0.300	ND	"	
Pyrene	"	"	"		1.00	ND	"	
Surrogate: Carbazole	"	"	"	*70.0-130*		*99.2*	%	

Great Lakes Analytical

**Refer to end of report for text of notes and definitions*

Sajal Patel, Project Manager

GREAT LAKES ANALYTICAL

1380 Busch Parkway
Buffalo Grove, Illinois 60089

Email: info@glalabs.com
(847) 808 7766 FAX (847) 808 7772

Blackhawk Consulting Services	Project:	Franche Paint	Sampled: 3/20/00 to 3/21/00
3700 Blackhawk Rd. #10	Project Number:	N/A	Received: 3/22/00
Rock Island, IL 61201	Project Manager:	Fred Lawrence	Reported: 4/7/00 14:56

Polynuclear Aromatic Compounds by EPA Method 8310
Great Lakes Analytical

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
B-1			**B003469-05**				**Water**	
Acenaphthene	0030562	3/23/00	3/28/00		10.0	ND	ug/l	G12
Acenaphthylene	"	"	"		8.00	**48.7**	"	G12
Anthracene	"	"	"		0.400	**11.7**	"	G12
Benz (a) anthracene	"	"	"		0.0200	**1.81**	"	G12
Benzo (a) pyrene	"	"	"		0.100	**0.886**	"	G12
Benzo (b) fluoranthene	"	"	"		0.0400	**2.82**	"	G12
Benzo (ghi) perylene	"	"	"		0.120	**0.414**	"	G12
Benzo (k) fluoranthene	"	"	"		0.100	**0.191**	"	G12
Chrysene	"	"	"		0.100	**5.20**	"	G12
Dibenz (a,h) anthracene	"	"	"		0.0400	**0.392**	"	G12
Fluoranthene	"	"	"		2.00	**54.8**	"	G12
Fluorene	"	"	"		2.00	**29.9**	"	G12
Indeno (1,2,3-cd) pyrene	"	"	"		0.400	ND	"	G12
Naphthalene	"	"	"		6.00	ND	"	G12
Phenanthrene	"	"	"		0.600	**109**	"	G12
Pyrene	"	"	"		2.00	**5.11**	"	G12
Surrogate Carbazole	"	"	"	*70.0-130*		*74.0*	%	*G12*
B-3			**B003469-06**				**Water**	
Acenaphthene	0030562	3/23/00	3/27/00		5.00	ND	ug/l	
Acenaphthylene	"	"	"		4.00	**16.6**	"	
Anthracene	"	"	"		0.200	ND	"	
Benz (a) anthracene	"	"	"		0.0100	**0.0537**	"	
Benzo (a) pyrene	"	"	"		0.0500	**0.0575**	"	
Benzo (b) fluoranthene	"	"	"		0.0200	**0.0410**	"	
Benzo (ghi) perylene	"	"	"		0.0600	ND	"	
Benzo (k) fluoranthene	"	"	"		0.0500	ND	"	
Chrysene	"	"	"		0.0500	**0.0719**	"	
Dibenz (a,h) anthracene	"	"	"		0.0200	ND	"	
Fluoranthene	"	"	"		1.00	**2.13**	"	
Fluorene	"	"	"		1.00	ND	"	
Indeno (1,2,3-cd) pyrene	"	"	"		0.200	ND	"	
Naphthalene	"	"	"		3.00	ND	"	
Phenanthrene	"	"	"		0.300	**1.11**	"	
Pyrene	"	"	"		1.00	ND	"	
Surrogate Carbazole	"	"	"	*70.0-130*		*95.8*	%	

Great Lakes Analytical

**Refer to end of report for text of notes and definitions.*

Satal Patel, Project Manager

GREAT LAKES ANALYTICAL

1380 Busch Parkway
Buffalo Grove, Illinois 60089

Email: info@glalabs.com
(847) 808-7766 FAX (847) 808-7772

Blackhawk Consulting Services	Project:	Franche Paint	Sampled: 3/20/00 to 3/21/00
3700 Blackhawk Rd. #10	Project Number:	N/A	Received: 3/22/00
Rock Island, IL 61201	Project Manager:	Fred Lawrence	Reported: 4/7/00 14:56

Volatile Organic Compounds by EPA Method 5035/8260B
Great Lakes Analytical

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
HA-6			**B003469-01**				**Soil**	**G12**
Acetone	0030772	3/28/00	4/6/00		125000	ND	ug/kg	
Benzene	"	"	"		25000	ND	"	
Bromodichloromethane	"	"	"		25000	ND	"	
Bromoform	"	"	"		25000	ND	"	
Bromomethane	"	"	"		25000	ND	"	
2-Butanone	"	"	"		50000	ND	"	
Carbon disulfide	"	"	"		25000	ND	"	
Carbon tetrachloride	"	"	"		25000	ND	"	
Chlorobenzene	"	"	"		25000	ND	"	
Chlorodibromomethane	"	"	"		25000	ND	"	
Chloroethane	"	"	"		25000	ND	"	
Chloroform	"	"	"		25000	ND	"	
Chloromethane	"	"	"		25000	ND	"	
1,1-Dichloroethane	"	"	"		25000	ND	"	
1,2-Dichloroethane	"	"	"		25000	ND	"	
1,1-Dichloroethene	"	"	"		25000	ND	"	
cis-1,2-Dichloroethene	"	"	"		25000	ND	"	
trans-1,2-Dichloroethene	"	"	"		25000	ND	"	
1,2-Dichloropropane	"	"	"		25000	ND	"	
cis-1,3-Dichloropropene	"	"	"		25000	ND	"	
trans-1,3-Dichloropropene	"	"	"		25000	ND	"	
Ethylbenzene	"	"	"		25000	ND	"	
2-Hexanone	"	"	"		50000	ND	"	
Methylene chloride	"	"	"		25000	ND	"	
4-Methyl-2-pentanone	"	"	"		50000	ND	"	
Styrene	"	"	"		25000	ND	"	
1,1,2,2-Tetrachloroethane	"	"	"		25000	ND	"	
Tetrachloroethene	"	"	"		25000	ND	"	
Toluene	"	"	"		25000	**588000**	"	
1,1,1-Trichloroethane	"	"	"		25000	ND	"	
1,1,2-Trichloroethane	"	"	"		25000	ND	"	
Trichloroethene	"	"	"		25000	ND	"	
Vinyl chloride	"	"	"		25000	ND	"	
Total Xylenes	"	"	"		25000	**56500**	"	
Surrogate: Dibromofluoromethane	"	"	"	*86.0-118*		*87.2*	%	
Surrogate: 1,2-Dichloroethane-d4	"	"	"	*80.0-120*		*89.2*	"	
Surrogate: Toluene-d8	"	"	"	*88.0-110*		*102*	"	
Surrogate: 4-Bromofluorobenzene	"	"	"	*86.0-115*		*97.4*	"	

Great Lakes Analytical

*Refer to end of report for text of notes and definitions

Sunil Patel, Project Manager

GREAT LAKES ANALYTICAL

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Blackhawk Consulting Services	Project:	Franche Paint	Sampled: 3/20/00 to 3/21/00
3700 Blackhawk Rd #10	Project Number:	N/A	Received: 3/22/00
Rock Island, IL 61201	Project Manager:	Fred Lawrence	Reported: 4/7/00 14:56

BTEX by EPA Method 8260B
Great Lakes Analytical

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
MW-2			**B003469-02**				**Water**	
Benzene	0030725	4/27/00	3/27/00		2.00	ND	ug/l	
Ethylbenzene	"	"	"		2.00	ND	"	
Toluene	"	"	"		2.00	ND	"	
Total Xylenes	"	"	"		2.00	ND	"	
Surrogate: Dibromofluoromethane	"	"	"	*86.0-118*		*105*	%	
Surrogate: 1,2-Dichloroethane-d4	"	"	"	*80.0-120*		*101*	"	
Surrogate: Toluene-d8	"	"	"	*88.0-110*		*101*	"	
Surrogate: 4-Bromofluorobenzene	"	"	"	*86.0-115*		*97.4*	"	
MW-4			**B003469-03**				**Water**	
Benzene	0030725	4/27/00	3/27/00		2.00	ND	ug/l	
Ethylbenzene	"	"	"		2.00	ND	"	
Toluene	"	"	"		2.00	ND	"	
Total Xylenes	"	"	"		2.00	ND	"	
Surrogate: Dibromofluoromethane	"	"	"	*86.0-118*		*106*	%	
Surrogate: 1,2-Dichloroethane-d4	"	"	"	*80.0-120*		*100*	"	
Surrogate: Toluene-d8	"	"	"	*88.0-110*		*101*	"	
Surrogate: 4-Bromofluorobenzene	"	"	"	*86.0-115*		*96.2*	"	
B-1			**B003469-05**				**Water**	
Benzene	0030725	4/27/00	3/28/00		2.00	**63.0**	ug/l	
Ethylbenzene	"	"	"		2.00	ND	"	
Toluene	"	"	"		2.00	**4.91**	"	
Total Xylenes	"	"	"		2.00	**5.84**	"	
Surrogate: Dibromofluoromethane	"	"	"	*86.0-118*		*103*	%	
Surrogate: 1,2-Dichloroethane-d4	"	"	"	*80.0-120*		*102*	"	
Surrogate: Toluene-d8	"	"	"	*88.0-110*		*100*	"	
Surrogate: 4-Bromofluorobenzene	"	"	"	*86.0-115*		*100*	"	
B-3			**B003469-06**				**Water**	
Benzene	0030725	4/27/00	3/28/00		2.00	**25.4**	ug/l	
Ethylbenzene	"	"	"		2.00	ND	"	
Toluene	"	"	"		2.00	ND	"	
Total Xylenes	"	"	"		2.00	ND	"	
Surrogate: Dibromofluoromethane	"	"	"	*86.0-118*		*103*	%	
Surrogate: 1,2-Dichloroethane-d4	"	"	"	*80.0-120*		*107*	"	
Surrogate: Toluene-d8	"	"	"	*88.0-110*		*101*	"	
Surrogate: 4-Bromofluorobenzene	"	"	"	*86.0-115*		*100*	"	

Great Lakes Analytical

**Refer to end of report for text of notes and definitions*

Satal Patel, Project Manager

Accreditations/Certifications: Illinois EPA 100261, New Jersey DEP 54001, USACE, Wisconsin DNR 999917160

GREAT LAKES ANALYTICAL

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3700 Blackhawk Rd. #10	Project Number:	N/A	Received: 3/22/00
Rock Island, IL 61201	Project Manager:	Fred Lawrence	Reported: 4/7/00 14:56

Notes and Definitions

#	Note
A	The concentration of the analyte detected in the sample is characteristic of a laboratory artifact.
G12	The reporting limit for this analyte has been elevated due to sample matrix and/or other effects
G2	The matrix QC recoveries associated with this sample were below the laboratory's established acceptance criteria.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
Recov.	Recovery
RPD	Relative Percent Difference

Great Lakes Analytical

Sarat Patel, Project Manager

××× CONFIRMATION REPORT ×××

SUCCESSFUL TX

06-23-00 09:40 ID:9135517063
PA REGION 7 SUPERFUND

JOB NUM.	----------	419
START TIME	----------	09:36
ID NUM.	----------	98946295
RESOLUTION	----------	STANDARD
TOTAL PAGES	----------	16
MACHINE ENGAGED	----------	04'18
INFORMATION	----------	OK

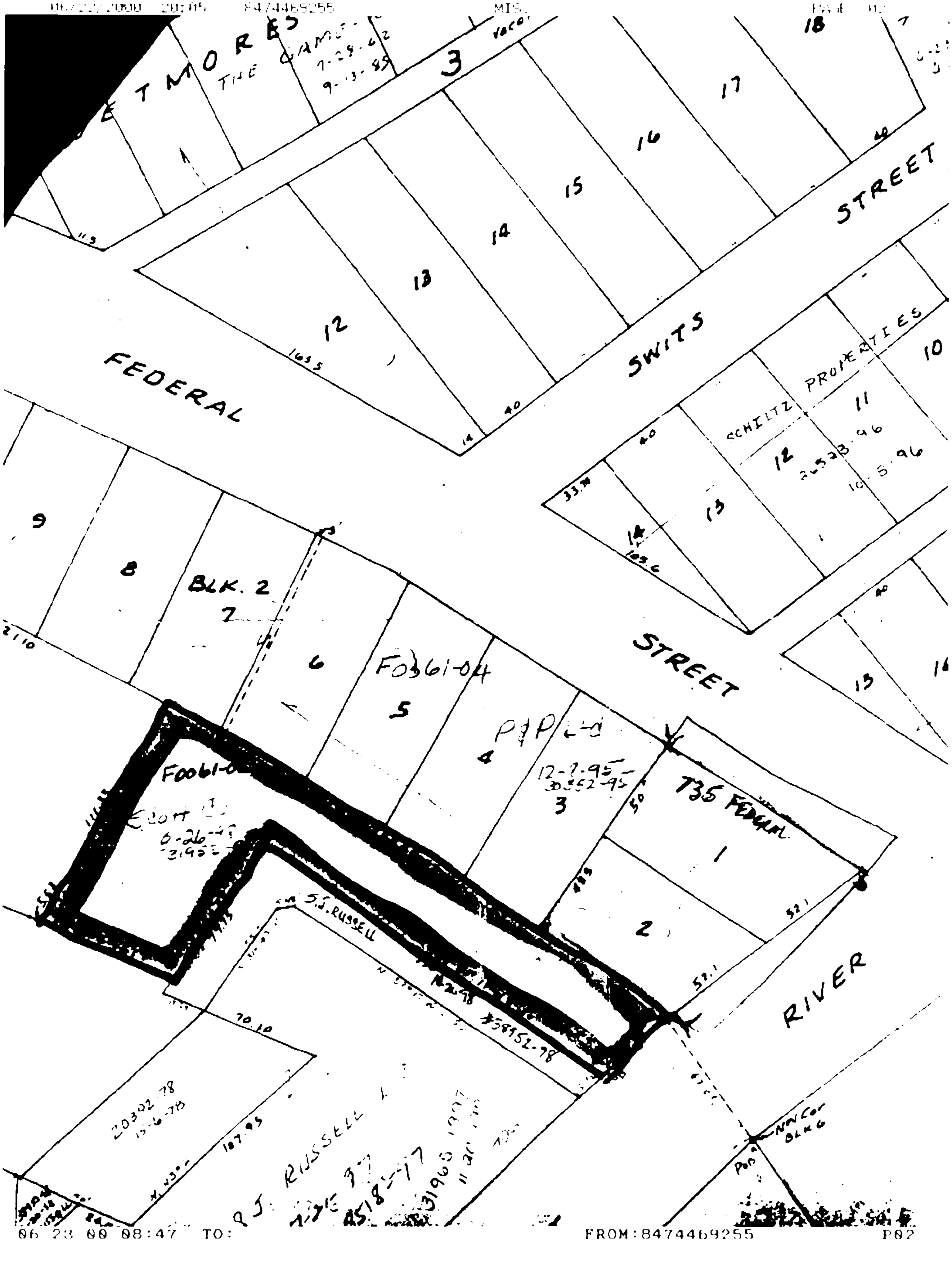
ENVIRONMENTAL PROTECTION AGENCY
901 N. 5th St.
KANSAS CITY, KS 66101

TO: Pat Cassidy
COMPANY: Texas Tech
DEPT.
FAX # 915 [illegible] - 6295

FROM: Don Hoffman
Superfund Division
PHONE # [illegible] - 7613
FAX # (913) 551-7948

COMMENTS:
Pat FYI Phase II investigation

# of pages Cover + 16


FEDERAL
STREET
SWITS
STREET
RIVER
BLK. 2
SCHILTZ PROPERTIES
T35 FEDERAL
S.J. RUSSELL
F0361-04
F0061-04
12-7-95
30552-95
20302-78
#38151-78
THE GAME
3

GREAT LAKES ANALYTICAL

CHAIN OF CUSTODY REPORT

Buffalo Grove, IL 60089-4505
(847) 808-7766
FAX (847) 808-7772

Brookfield, WI 53501
(414) 798-1030
FAX (414) 798-1066

Client: Blackhawk Consulting
Bill To: SAME
TAT: (5 DAY) 4 DAY 3 DAY 2 DAY 1 DAY < 24 HRS

Address: 3700 Blackhawk Rd
Rock Island IL 61201
Address:
DATE RESULTS NEEDED:
TEMPERATURE UPON RECEIPT: 4°

Report to: Fred Lawrence
Phone #: (309) 786-6007
Fax #: (—) —6015
State & Program:
Phone #: ( )
Fax #:
UPS
AIR BILL NO. N326 2468 80 3

Project: Francke Paint
Sampler: Fred Lawrence
PO/Quote #:

	FIELD ID, LOCATION	DATE COLLECTED	TIME COLLECTED	SAMPLE MATRIX	PRESERVATIVES	NO. CONTAINERS	TYPE CONTAINERS	TCL VOA 8260	BETX 8260	TCL SVOA 8270	PNA 8310	Lead 6010	CRACKED BROKEN	PROPERLY SEALED	GOOD CONDITION	LABORATORY ID NUMBER
1	HA-6	3/20/00	1400	SOIL	4°C	2	100 4oz	1		1 →						B003469-1
2	MW-2	3/21/00	1430	GW	4°C HCl		40 ml 1 L		3		1					2
3	MW-4	3/21/00	1330	GW	"		"		3		1					3
4	MW-7	3/21/00	1200	GW	"		"	3		2						4
5	B-1	3/21/00	1020	GW	"		"		3		1					5
6	B-3	3/21/00	1100	GW	"		"		3		1					6
7																
8																
9																
10																

RELINQUISHED: Fred W Lawrence 3/21/00
RECEIVED: Shipped UPS
RELINQUISHED:
RECEIVED: [signature] 3/22/00
RELINQUISHED:
RECEIVED:
RELINQUISHED:
RECEIVED:

COMMENTS: WARNING: ALL samples appear to be highly contaminated.

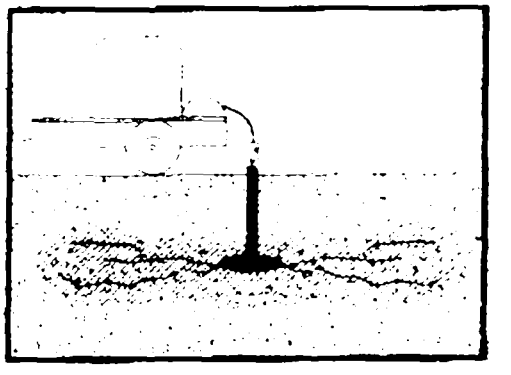
PAGE 1 OF 1

Blackhawk
CONSULTING SERVICES

ATTACHMENT 1

Bioinjection

Insitu bioremediation is a proven technology for soil remediation. The technique works well if optimal oxygen and nutrient requirements for bacterial activity are maintained. The Bioinjection system provides conditions favorable for bacterial degradation of petroleum contaminants. The technique is often used at sites where contaminated soils cannot be removed by excavation without damage to structures on-site.



In-situ remediation of contaminated soil and groundwater is particularly difficult to achieve in over-consolidated materials such as glacial tills and clay rich soils with low permeability. The Bioinjection process, as described here, provides a technique to cost-effectively accomplish that goal. The process involves hydraulically fracturing the soil in the contaminated area in order to more effectively distribute the enhanced bioremediation fluids. The bioremediation fluids include a superoxygenated mix of nutrients selected specifically for the site and, if needed, specialized bacteria. The relatively low cost per application allows frequent applications of the fluid mix on a close spacing to more effectively treat the contamination. Whenever possible the water used for the remedial fluids is groundwater from beneath the site. This technique avoids the problems inherent in other in-situ methods involving the direct injection of chlorinated water and harsh chemicals such as hydrogen peroxide which are toxic to the beneficial bacteria and can cause unwanted reactions.

Bioinjection points are typically installed on a grid. The grid spacing is determined based on site conditions. "Permanent" bioinjection points are constructed of steel tubing driven or jetted to the desired depth. If necessary, the annulus outside of the steel tubing is cemented in order to seal the annulus to the surface. High pressure water is first injected into the bottom of a borehole to cut a disk shaped notch that serves as the starting point for the fracture. The superoxygenated mix of nutrients are introduced into the contaminated soil by direct injection under pressure sufficient to hydraulically fracture the soil. The remedial fluids are forced into the contaminant migration pathways. The remedial fluids can also be applied directly at locations between the "permanent" bioinjection points by quickly jetting a boring to the desired depth and injecting the remedial fluids under pressure. "Permanent" bioinjection points are typically installed at sites or locations where the disturbance caused by repeated jetting applications may not be acceptable.

Oxygen is added to the makeup water using an oxygen exchange membrane in a storage tank. The dissolved oxygen concentration of the makeup water is greater than 20 parts per million. The maximum dissolved oxygen concentration achieved by air sparging is 8 parts per million. The nutrient and surfactant solutions are not mixed with the makeup water until just prior to injection. The remedial fluids are applied under pressure at rate of 1 to 4 gallons per minute. The volume of fluid applied is sufficient to treat the soil within the site specific radius of influence of the injection point. The treatment is typically repeated monthly to bimonthly until the cleanup objectives are achieved. Biodegradation of the soil contaminants to levels below the cleanup objectives is typically accomplished within 6 months to two years.

Blackhawk Consulting Services, Inc. • 3700 Blackhawk Road, Suite 10 • Rock Island, IL 61201 • (309) 786-6009